36 y/o female with a right sided mandibular mass

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Parotitis
CECT Axial: Heterogeneously enhancing right parotid gland
CECT Coronal: Heterogeneously enhancing and enlarged right parotid gland. Minimal surrounding fat stranding (blue arrow)
Parotitis

Imaging Features

- Enlarged, enhancing parotid gland
  - Abscess – Ring enhancement
  - May see ductal dilatation if obstruction from stone
  - Viral – Enlarged and mildly enhancing.
    - 75% bilateral
    - Occasionally enhancement and enlargement of submandibular and sublingual glands as well

- Fat stranding
  - Bacterial: significant inflammatory stranding of fat
  - Viral: mild inflammatory fat stranding
Parotitis

Etiology

• Bacterial
  – Ascending infection
    • S. aureus in 50-90%
  – Ductal obstruction

• Viral
  – Mumps (paramyxovirus) most common
  – Influenza, parainfluenza, Coxsackie A and B

• Parotid is most commonly inflamed salivary gland due to absence of bacteriostatic mucin in its secretions
  – Acute onset pain, tenderness, warmth, and swelling - Bacterial
  – Viral prodrome followed by parotid pain, earache, and trismus. Swelling without much erythema or warmth
Reference